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EXAMINER	
LU, KUEN S	
ART UNIT	**PAPER NUMBER**
2167	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/800,311	HEUSERMANN ET AL.	
	Examiner	Art Unit	
	Kuen S. Lu	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/16/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Action is responsive to Applicant's Application filed March 12, 2004. Please note Claims 1 and 2-37 are pending.

Information Disclosure Statement

2. The information disclosure statement filed December 16, 2004 is in compliance with 37 CFR 1.97(c) and therein has been considered. Its corresponding PTO-1449 has been electronically signed as attached.

Drawings

3. The drawings, filed March 12, 2004, are considered in compliance with 37 CFR 1.81 and accepted.

Claim Objections

4. Claims 2, 14 and 26 are objected to because of the following informalities:

As per claims 8, 20 and 32, the claims recite *data objects* **are** processed according to a reaction **and** stored within a data object (or copy of a data object). It seems suggesting *data objects* **are** processed according to a reaction **and** *data objects* **are** stored within a data object (or copy of a data object) as Examiner interprets accordingly. The claims are ambiguous about how data objects get processed. Is the process a comparison or consistency check? Should Examiner interpret processed data objects are stored within a data object (or copy of a data object)? Appropriate clarification or correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 20 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite "the compared data package" which fails to specify if the package is from the first data object or the package sent by a second system. Also noted is that two data packages are compared.

Claim Rejections - 35 USC § 101

6.1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.1.1. As set forth in MPEP 2106 (II) (A):

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application

6.1.2. As set forth in MPEP 2106 (IV) (B) (1):

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas

or laws of nature which constitute "descriptive material." Abstract ideas, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

6.1.3. As set forth in MPEP 2106 (IV)(B)(1)(a):

Similarly, computer programs claimed as computer listings *per se, i.e.,* the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material *per se from claims* that define statutory inventions.

Products may be either machines, manufactures, or compositions of matter.
A machine is "a concrete thing, consisting of parts or of certain devices and combinations of devices. *Burr v. Duryee. 68* U.S. (1 Wall.) *531, 570 (1863).*
If a claim defines a useful machine or manufacture by identifying the physical structure of the machine or manufacture in terms of its hardware or hardware and software combination, it defines a statutory product. See, e.g., *Lowry, 32 F.3d* at *1583, 32* USPQ2d at *1034-35; Warmerdarn,* 33 F.3d at 1361-62, 31 USPQ2d at 1760.
Office personnel must treat each claim as a whole. The mere fact that a hardware element is recited in a claim does not necessarily limit the claim to a specific machine or manufacture. Cf. *In re Iwahashi, 888* F.2d 1370, 1374-75, 12 USPQ2d 1908, *191 1*-12 (Fed. Cir. 1989), cited with approval in *Alappat,* 33 F.3d at 1544 n.24, 31 USPQ2d at 1558 n_24.

6.2. Claims 1-7, 13-19, 25-31 and 37 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

As per claims (1, 13) and 25, the claims respectively recite a method and a program product

for checking data consistency of data objects comprising steps of receiving (or sending), storing, generating, sending and comparing. Noted is the step of comparing data packages of two data objects by self does not ensue any useful, tangible and concrete result. Example elements for producing useful, tangible and concrete result include manipulation of data that represents a physical object or activity transformed from outside the computer and a direct recitation of a practical application, for example, the result of the comparison step is saved, reported or displayed such that data consistency check operation can rely upon the compared. However, a tangible, concrete and useful result is required in a practical application test. The consequence is non-statutory.

As per claim 37, the claim is a system for checking data consistency of data objects comprising systems to perform similar steps as recited in claims 1, 13 and 25. Based on the same rationale as described above for rejecting claims 1, 13 and 25, claims is rejected as non-statutory under 35 U.S.C. § 101.

As per claims in the groups (2-7), (14-19) and (25-31), the claims inherit the deficiency of being non-statutory directly from claims 1, 13 and 25, respectively, and do not remedy the deficiency individually. The consequence is non-statutory.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7.1. Each claim in the claims groups *(1, 9-12), (13, 21-24) and (25,33-36)* is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims (**1, 3, 3, 3, 2), (1, 3, 3, 3, 2) and (15, 16, 16, 16, 17)**, correspondingly and respectively, of U.S. Patent No. **7,092,973**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the elements and its combined subject matter described by the elements of the each claim of *instant application* is not patentably distinct from the same elements of claims and its combined subject matter described by the elements of corresponding claim of U.S. Patent No.

7,092,973. Listed below are the pairs of all corresponding pairs, and the elements of corresponding independent claims of *instant application* and U.S. Patent **7,092,973:**

1 (**1**); 9 (**3**); 10 (**3**); 11 (**3**); 12 (**2**); 13 (**1**); 21 (**3**); 22 (**3**); 23 (**3**); 24 (**2**); 25 (**15**); 33 (**16**); 34 (**16**); 35 (**16**); 36 (**17**).

Claim 1 *of instant application* versus **claim 1 of U.S. Patent 7,092,973;**

storing a copy of the first data object within the second system;

generating a second data object from the first data object;

sending the second data object and the copy of the first data object to the first system; and

comparing at least one data package of the first data object with at least one data package of the copy of the first data object sent by the second system using a consistency check operation stored within the first data object, the second data object, or the copy of the first data object.

sending a first data object from a first system to a second system;

storing the first data object in the second system; generating, in the second system, a second data object from the first data object;

sending the second data object and the first data object from the second system to the first system, wherein sending comprises always sending complete copies of the first data object and the second data object to the first system;

determining, in the first system, whether the first data object received from the

second system at least partly matches a current version of the first data object on the first system; and

accepting the second data object if there is an identical match between the first data object received from the second system and the current version of the first data object on the first system.

Claim 13 *of instant application* versus **claim 1 of U.S. Patent 7,092,973;**

sending a first data object from a first system to a second system;

storing a copy of the first data object within the first system;

generating a second data object from the first data object;

sending the second data object to the first system;

comparing a data package of the copy of the first data object as originally stored with a data package of the second data object sent by the second system using a consistency check operation stored within the first data object, the second data object, or the copy of the first data object.

sending a first data object from a first system to a second system;

storing the first data object in the second system; generating, in the second system, a second data object from the first data object;

sending the second data object and the first data object from the second system to the first system, wherein sending comprises always sending complete copies of the first data object and the second data object to the first system;

determining, in the first system, whether the first data object received from the

second system at least partly matches a current version of the first data object on the first system; and

accepting the second data object if there is an identical match between the first data object received from the second system and the current version of the first data object on the first system.

Claim 25 *of instant application* versus **claim 15 of U.S. Patent 7,092,973;**

receive in a second system a copy of a first data object stored in a first system;

store a copy of the first data object within the second system;

generate a second data object from the first data object;

send the second data object and the copy of the first data object to the first system; and

compare at least one data package of the first data object with at least one data package of the copy of the first data object sent by the second system using a consistency check operation stored within the first data object, the second data object, or the copy of the first data object.

send a first data object from a first system to a second system;

receive, from the second system, the first data object and a second data object, the second data object being derived based on the first data object, wherein receiving comprises always receiving complete copies of the first data object and the second data object from the second system;

determine whether the first data object received from the second system at least partly matches a current version of the first data object on the first system; and

accept the second data object if there is an identical match between the first data object received from the second system and the current version of the first data object on the first system.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8.1. Claims 1, 5, 9-10, 13, 17, 21-22, 25, 29, 33-34 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson et al. (U.S. Patent 6,892,210, hereafter "Erickson").

As per claims 1 and 25, Erickson teaches a method or program product for checking data consistency of data objects of distributed systems within a computer network (See Abstract where synchronization program is implemented on peer to peer network architecture for data object synchronization), comprising:

"receiving in a second system a copy of a first data object stored in a first system" (See col. 4, lines 5-40 where data records are synchronized from a system to another);

"storing a copy of the first data object within the second system" (See Figs. 1A-1B and col. 8, line 59 – col. 9, line 11 where duplicate record embedded in sync object are sent to another system to store);

"generating a second data object from the first data object" (See col. 8, lines 40-55 where sync object is created);

"sending the second data object and the copy to the first system" (See col. 10, lines 35-45 where user computer changes record, creates sync object and sends the object to Sync Computer for qualifying the change); and

"comparing at least one data package of the first data object with at least one data package of the copy of the first data object sent by the second system" (See col. 19, lines 55-65 where col. 19, lines 55-65 where the match between fields lists of sync object and the list contained in receive sync profile is determined).

Erickson does not explicitly teach that the determination is done by using "a consistency check operation stored within the first data object, the second data object, or the copy of the first data object".

However, Erickson does teach providing for more efficient communication and greater control of data consistency while sharing flexibility and scalability of a peer-to-peer architecture (See col. 2, lines 45-58).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to implement a consistency check operation stored within a data object because Erickson offers the data consistency and data control in a peer-to-peer architecture and the detailed implementation of the data consistency check

would have further enhanced the advantage as set forth and greatly reduced the limitation of data synchronization of a client-server architecture while greatly improved data sharing flexibility and scalability of a peer-to-peer architecture.

As per claim 13, Erickson teaches "A method for checking data consistency of data objects of distributed systems within a computer network" (See Abstract where synchronization program is implemented on peer to peer network architecture for data object synchronization), comprising:

"sending a first data object from a first system to a second system" (See col. 4, lines 5-40 where data records are synchronized from a system to another);

"storing a copy of the first data object within the first system" (See Figs. 1A-1B and col. 8, line 59 – col. 9, line 11 where duplicate record embedded in sync object are sent to another system to store);

"generating a second data object from the first data object" (See col. 8, lines 40-55 where sync object is created);

"sending the second data object to the first system" (See col. 10, lines 35-45 where user computer changes record, creates sync object and sends the object to Sync Computer for qualifying the change); and

"comparing a data package of the copy of the first data object as originally stored with a data package of the second data object sent by the second system" (See col. 19, lines 55-65 where col. 19, lines 55-65 where the match between fields lists of sync object and the list contained in receive sync profile is determined).

Erickson does not explicitly teach that the determination is done by using "a consistency check operation stored within the first data object, the second data object, or the copy of the first data object".

However, Erickson does teach providing for more efficient communication and greater control of data consistency while sharing flexibility and scalability of a peer-to-peer architecture (See col. 2, lines 45-58).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to implement a consistency check operation stored within a data object because Erickson offers the data consistency and data control in a peer-to-peer architecture and the detailed implementation of the data consistency check would have further enhanced the advantage as set forth and greatly reduced the limitation of data synchronization of a client-server architecture while greatly improved data sharing flexibility and scalability of a peer-to-peer architecture.

As per claim 37, Erickson teaches "A computer system for checking data consistency of data objects of distributed systems within a computer network, the system" (See Abstract where synchronization program is implemented on peer to peer network architecture for data object synchronization) comprising:
"a first system connected to a second system" (See Figs. 1A-1B and Abstract where a network connects a pool of computer systems);
"the first system being configured to send a first data object to the second system, to receive a second data object" (See col. 4, lines 5-40 where data records are

synchronized from a system to another) and "a copy of the first data object from the second system" (See Figs. 1A-1B and col. 8, line 59 – col. 9, line 11 where duplicate record embedded in sync object are sent to another system to store), and "to compare at least one data package of the first data object with at least one data package of the copy of the first data object received by the first system" (See col. 19, lines 55-65 where col. 19, lines 55-65 where the match between fields lists of sync object and the list contained in receive sync profile is determined).

Erickson does not explicitly teach that the determination is using "a consistency check operation stored within the first data object".

However, Erickson does teach providing for more efficient communication and greater control of data consistency while sharing flexibility and scalability of a peer-to-peer architecture (See col. 2, lines 45-58).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to implement a consistency check operation stored within a data object because Erickson offers the data consistency and data control in a peer-to-peer architecture and the detailed implementation of the data consistency check would have further enhanced the advantage as set forth and greatly reduced the limitation of data synchronization of a client-server architecture while greatly improved data sharing flexibility and scalability of a peer-to-peer architecture.

Erickson further teaches "the second data object, or the copy of the first data object" (See col. 4, lines 5-40 where data records are synchronized from a system to another); and "the second system being configured to receive the first data object from the first

system" (See col. 4, lines 5-40 where data records are synchronized from a system to another), "to store the copy of the first data object, to generate the second data object from the first data object" (See Figs. 1A-1B and col. 8, line 59 – col. 9, line 11 where duplicate record embedded in sync object are sent to another system to store), and "to send the second data object and the copy of the first data object to the first system" (See col. 10, lines 35-45 where user computer changes record, creates sync object and sends the object to Sync Computer for qualifying the change).

As per claims 5, 17 and 29, Erickson teaches "the data object comprises a plurality of data packages" (See Fig. 3A and col. 11, lines 8-15 where each record in database table is interpreted as a data package in a data object).

As per claims 9, 21 and 33, Erickson teaches "the consistency check operation compares object data included within the data packages and characterizes the data objects as consistent in the event that all object data are consistent" (See col. 19, line 62 – col. 20, line 32 where data object is accepted when the match is identical).

As per claims 10, 22 and 34, Erickson teaches "the consistency check operation compares object data included within the data packages and characterizes the data objects as consistent in the event that at least some of the object data are consistent" (See col. 19, line 66 – col. 20, line 67 where data object is accepted when data objects matches some condition in the comparison).

8.2. Claims 2-4, 6-8, 11-12, 14-16, 18-20, 23-24, 26-28, 30-32 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson et al. (U.S. Patent 6,892,210, hereafter "Erickson") as applied to claims 1, 13 and 25 above and further in view of Archibald Jr. et al. (U.S. Patent 6,892,210), hereafter "Archibald Jr.").

As per claims 2, 14 and 26, Erickson teaches "the first data object and the second data object are processed" (See col. 19, lines 55-65 where col. 19, lines 55-65 where the match between fields lists of sync object and the list contained in receive sync profile is determined).

Erickson does not explicitly teach that he data objects are processed in "according to a reaction dependent on the consistency check operation and stored within the first data object, the second data object, or the copy of the first data object".

However, Archibald Jr. teaches consistency check is perform on data stripe and parity data is stored in the data stripe (See col. 1, lines 35-52).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Archibald Jr. with Erickson reference because both references are directed to data consistency check where Erickson focuses on data consistency check on data synchronized on a peer-to-peer network computers while Archibald Jr. implements an overall device data consistency

check and the combined teaching would how allowed peer-to-peer network to check data consistency in a large scale and a more efficient manner.

As per claims 3, 15 and 27, the combined teaching of Archibald Jr. and Erickson references further teaches "storing, within the copy, a system identifier that identifies the first data object, an originating system of the first data object, or the first data object and the originating system of the first data object" (See Archibald Jr.: col. 1, lines 35-52 where consistency check is perform on data stripe and parity data is stored in the data stripe).

As per claims 4, 16 and 28, the combined teaching of Archibald Jr. and Erickson references further teaches "object status information is stored within the copy" (See Archibald Jr.: col. 1, lines 35-52 where consistency check is perform on data stripe and parity data is stored in the data stripe).

As per claims 6, 18 and 30, the combined teaching of Archibald Jr. and Erickson references further teaches "the data packages are compared sequentially" (See Erickson: col. 19, lines 55-65 where col. 19, lines 55-65 where the match between fields lists of sync object and the list contained in receive sync profile is determined, and Archibald Jr.: col. 1, lines 35-52 where consistency check is perform sequentially on data stripe and parity data is stored in the data stripe).

As per claims 7, 19 and 31, the combined teaching of Archibald Jr. and Erickson references further teaches "the data packages are compared hierarchically" (See Erickson: col. 19, lines 55-65 where col. 19, lines 55-65 where the match between fields lists of sync object and the list contained in receive sync profile is determined, and Archibald Jr.: col. 26, item 7 where data storage management is hierarchical).

As per claims 8, 20 and 32, the combined teaching of Archibald Jr. and Erickson references further teaches "a consistency check operation description and at least one reaction are stored within the compared data package" (See Archibald Jr.: col. 1, lines 35-52 where consistency check is perform on data stripe and parity data is stored in the data stripe).

As per claims 11, 25 and 35, the combined teaching of Archibald Jr. and Erickson references further teaches "executing a reaction in the event that that the consistency check operation characterizes the data objects as consistent, wherein the reaction includes an action selected from the group consisting of:
"merging the second data object into the first data object, marking the first data object for review, marking the second data object for review, marking the first data object and the second data object for review, marking the packages of the data objects for review, and replacing the first data object with the second data object" (See Erickson: col. 19, lines 55-65 where col. 19, lines 55-65 where the match between fields lists of sync object and the list contained in receive sync profile is determined, and Archibald Jr.: col.

1, lines 35-52 where consistency check is perform on data stripe and parity data is stored in the data stripe).

As per claims 12, 24 and 36, the combined teaching of Archibald Jr. and Erickson references further teaches "executing a reaction in the event that the consistency check operation does not characterize the data objects as consistent, wherein the reaction includes an action selected from the group consisting of: canceling the second data object, and the copy of the first data object, marking the first data object for review, marking the second data object for review, marking the first data object and the second data object for review, marking the packages of the data objects for review, replacing the first data object with the second data object, and maintaining the first data object unchanged" (See col. 19, lines 63-65 data object is not accepted if objects are not matched in comparison, and Archibald Jr.: col. 1, lines 35-52 where consistency check is perform on data stripe and parity data is stored in the data stripe).

Conclusion

9. The prior art made of record

A. U.S. Patent No. 6,892,210

B. U.S. Patent No. 6,918,006

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

C. U.S. Patent Application 2005/0033828

D. U.S. Patent Application 2002/0169995

E. U.S. Patent No. 4,789,986

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-305-39000.

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